

Becoming Familiar with littleBits

HOW LITTLEBITS WORK

The Bits are designed to snap together, end to end, to create a complete circuit. The magnets inside each of the Bits' connectors ensure that students always attach the Bits the right way.

The Power Bit, Battery & Cable

Each student or student group will need a power Bit, a 9V battery, and a littleBits battery cable. All three components are necessary to start a circuit.



The Color Code

Bits are grouped into four color-coded categories:

- **POWER** is needed in every circuit and is the start of all your students' creations.
- **INPUT** Bits add control to the circuit, through information provided from your students and/or the environment, and send signals to the Bits that follow.
- **OUTPUT** Bits complete an action or a task (for example, light, buzz, or move). These are the Bits that "do something."
- **WIRE** Bits expand the circuit's reach and change direction. Students use the wire Bits to help place Bits exactly where they want, especially if they are embedding inside a structure. Some orange Bits also add a level of complexity and programmability to the circuit.

Order is Important

Power Bits always come first and input Bits only affect the Bits that come after them.



* Occasionally Bits get updated, so the features or appearance of your Bits may differ from those used in this guide.